



September 2, 2016

Mr. James Sales
United States Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202

RE: Former Westlake Gas Plant Site, Nolan County, Texas
Update to Self-Implementing Remedial Action Plan

Dear Mr. Sales:

This letter is being submitted as an update to the June 30, 2014 "Supplemental Information to Remedial Action Plan" letter for the referenced site. Remediation of polychlorinated biphenyls (PCBs) was initiated at the site in December 2014 as a self-implementing on-site cleanup under 40 CFR 761.61(a).

The June 30, 2014 submittal stated that the self-implementing cleanup was being performed for on-site soils and concrete. Since initiation of remediation, Anadarko and the adjacent property owner, the 69 Ranch, have reached an agreement whereby the "off-site" area, owned by the 69 Ranch, will be remediated by Anadarko with the "on-site" area as one contiguous remediation area, following the plan established in the June 30, 2014 submittal. The contiguous remediation area (both on-site and off-site) is currently fenced and remediation is being conducted under Anadarko's control. Therefore, this letter clarifies that the self-implementing cleanup under 40 CFR 761.61(a) for a low occupancy area applies to the entire contiguous remediation area.

Additionally, this letter serves to update the written certification required by 40 CFR 761.61(a)(3)(E) regarding the location of sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the site. These items were formerly located at the site location in a temporary work trailer. These files are now located at the AECOM Dallas, Texas Office at 1950 N. Stemmons Freeway, Suite 6000, Dallas, Texas 75207. The signatures required by 40 CFR 761.61(a)(3)(E) for both Anadarko and AECOM certifying the location of the above-mentioned documents are provided below.

Once site activities have been completed, a formal report documenting the PCB remediation will be finalized and submitted to the USEPA.


If you have any questions or concerns please feel free to contact me at 832-636-3651 or Brian.Noonan@anadarko.com.

ANADARKO PETROLEUM CORPORATION

1201 LAKE ROBBINS DRIVE • THE WOODLANDS, TEXAS 77380

P.O. BOX 1330 • HOUSTON, TEXAS 77251-1300

Respectfully,
ANADARKO PETROLEUM CORPORATION

A handwritten signature in black ink, appearing to read 'B JN', followed by a long horizontal line extending to the right.

Brian J. Noonan
Remediation Advisor
Anadarko Petroleum Corporation

For AECOM:

A handwritten signature in black ink, appearing to read 'MS', followed by a long horizontal line extending to the right.

Marwan Salameh, PhD, P.E.
Sr. Program Manager
AECOM

Sales, James

From: Noonan, Brian <Brian.Noonan@anadarko.com>
Sent: Thursday, September 01, 2016 1:17 PM
To: Sales, James
Subject: RE: Westlake Project - information

Dear Jim,

As a follow-up to our phone call from this morning, I have gone back and looked at our files. Here is a timeline of activities.

The initial Remedial Action Plan (RAP) was submitted to you in May 2014 and covered both the former gas plant property and the adjoining ranch property immediately to the south. The May 2014 RAP sought to remediate the former gas plant property and the adjoining ranch property using a risk-based approach per 40 CFR 761.61(c). The proposed clean-up levels per the May 2014 RAP were the removal >25 parts per million (PPM) on the 69 Ranch Property and a clean-up level of either >25 or >50 ppm on the former gas plant.

Following submittal of the RAP, a meeting was held between EPA, Anadarko, and AECOM. As a result of that meeting, Anadarko submitted "Supplemental Information to Remedial Action Plan" for the site on June 30, 2014. The reason for the supplement was a change from a risk-based approach (40 CFR 761.61(c)) to the self-implementing approach (40 CFR 761.61(a)). The clean-up level for the self-implementing approach is <25 PPM as the entire site is considered a low occupancy area. The areas to be remediated to the 25 PPM level have been and will continue to be fenced to preclude grazing from the area. Areas outside of the fence will be remediated to <1 PPM.

After submittal of the RAP supplement and receiving no additional comments, approval of the plan was assumed per 761.61(a)(3)(ii), and remediation activities were initiated to the self-implementing, low occupancy cleanup goal in December 2014. Remediation is currently ongoing.

At the completion of remediation activities, all of the areas at the site remediated to the low occupancy cleanup goal of 25 PPM will remain fenced (to preclude grazing). The areas outside of the fence will be remediated to <1 ppm.

Anadarko and AECOM will provide an update on the progress of remediation activities at our scheduled meeting on September 29, 2016. In the meantime, please feel free to give me a call with any questions.

Thanks,
Brian

From: Sales, James [mailto:sales.james@epa.gov]
Sent: Wednesday, August 31, 2016 12:12 PM
To: Noonan, Brian
Subject: RE: Westlake Project - information

Hello. What is the status of this project?

From: Sales, James
Sent: Monday, June 13, 2016 3:52 PM
To: Trim, JEWELINE <Trim.Jill@epa.gov>
Subject: FW: Westlake Project - information

From: Noonan, Brian [<mailto:Brian.Noonan@anadarko.com>]
Sent: Friday, July 10, 2015 7:54 AM
To: Sales, James <sales.james@epa.gov>
Cc: Eades, Natalie <Natalie.Eades@anadarko.com>
Subject: Westlake Project - information

Dear Mr. Sales,

In partial fulfillment of the USEPA's request for documentation related to the Westlake Site health and safety procedures in response to an anonymous complaint received by the USEPA on or about July 7, 2015 regarding decontamination procedures, worker training and hazard communication, below is a timeline of activities and a list of documents prepared by AECOM.

Timeline of activities and a list of the documents prepared by AECOM.

05/2014 – AECOM prepared a Remedial Action Plan for the remediation of PCB impacted material and submitted the plan to Anadarko for submittal to the USEPA.

11/11/2014 – A site kickoff meeting was conducted at the site. Anadarko and Anadarko's contractor representatives present during the meeting including JWS Restoration and AECOM. During the meeting the path forward of the project was discussed.

11/17/2014 – AECOM prepared a Health and Safety plan (HASP) for AECOM personnel and AECOM's subcontractors. AECOM conducts daily tailgate meetings with itself and its subcontractors.

11/2014 - AECOM prepared an air monitoring plan for excavation activities at the site. The plan was implemented as discussed below.

12/2014 AECOM prepared and submitted to the TCEQ a permit by rule (PBR) for project remediation activities under 30 TAC 106.533.

12/2014 – AECOM prepared a Stormwater Pollution Prevention Plan (SWPPP) on behalf of Anadarko. The SWPPP was prepared according to the guidelines of the Texas Pollution Discharge Elimination System (TPDES) General Permit No. TXR150000, effective March 5, 2013 under the provisions of Section 402 of the Clean Water Act (CWA) and Chapter 26 of the Texas Water Code (TWC).

Personal protective equipment and mitigation of exposure to impacted soils.

The AECOM HASP only pertains to AECOM personnel and AECOM subcontractors, however, AECOM has stored additional PPE supplies in the onsite trailer at the site which include Tyvek coveralls, booties, nitrile gloves, hearing protection and dust masks; these items are available to all site workers including AECOM, AECOM subcontractors or any other site workers. The standard PPE for AECOM personnel included in the AECOM HASP is hard hat, steel toed boots, safety glasses and long sleeve shirts.

Reduction to the exposure air borne dust is controlled by JWS spraying water from their water wagon. Dust masks are also available as required.

Reduction to the exposure to soils has been controlled by the use of booties in the higher impacted areas. Standard PPE plus Tyvek coveralls, booties and dust masks were also used during certain activities.

Hazardous communication and training

For AECOM personnel, hazardous communications is part of the site specific Health and Safety Plan (HASP), which was developed for AECOM and AECOM subcontractors. Items addressed include proper labeling of containers, safety data sheets and training. All AECOM site workers have received the 40 hour initial Hazwoper training and annual 8-hour refresher training. Additionally all AECOM site worker have completed the SafeLandUSA training which is required by Anadarko. The site specific HASP and the task hazard analyses included in the HASP have been used during the daily "tail gate" meetings as additional methods of communication. Safety Data Sheets are available as a part of the onsite HASP document and in the AECOM equipment and PPE storage area in the onsite trailer.

Air Monitoring

Air monitoring activities were conducted during the majority of these activities. Monitoring data show that the total dust concentrations have not exceeded action levels established in the AECOM HASP and Air Monitoring Plan.

Decontamination of vehicles

All vehicles used to excavate or load PCB impacted waste remain in the fenced-in impacted area. If it is necessary to move a piece of equipment from the impacted area to the area outside of the fence, the vehicle is inspected for dirt which may be adhering to the tires, tracks or bucket. The tires, tracks and buckets are mechanically cleaned and, if necessary, pressure washed with the water wagon and then visually inspected a second time. Prior to releasing a piece of equipment from the site, it is mechanically cleaned and then thoroughly washed down. Laboratory supplied wipe sampling kits are the used by AECOM personnel to collect wipe samples on the vehicle from areas that would have been in contact with PCB impacted material. The wipe samples are then submitted to an approved laboratory for analysis of PCBs. All results received for equipment released from the site have indicated that results are below acceptable limits for reuse.

Waste loading and pick up

Roll-off boxes are supplied by Smartt Move/Fluid Transports in Roscoe, Texas. The roll-off boxes are double lined with plastic sheeting. The boxes are loaded using a front-end loader operated by JWS personnel. Over the road trucks operated by Fluid Transports personnel drop off empty roll-off boxes and pick up full roll-off boxes. The over the road trucks which transport the waste to landfills are not allowed to enter the impacted portion of the site. The trucks are only allowed to enter a specially prepared loading area. The loading pad is constructed of clean imported caliche (laboratory tested) which is approximately six inches thick. The transportation trucks are allowed to back onto the loading pad to drop off empty roll-off boxes and to pick up full roll-off boxes. No shipping is allowed during wet-weather conditions.

Brian J. Noonan

HSE Advisor- Remediation

ANADARKO PETROLEUM CORPORATION

1201 Lake Robbins Drive, Rm16034

The Woodlands, Texas 77380

832-636-3651 (Office)

281-923-7844 (Mobile)

[Click here for Anadarko's Electronic Mail Disclaimer](#)

Sales, James

From: Sales, James
Sent: Tuesday, June 14, 2016 10:39 AM
To: Jones, Bruced
Subject: RE: Emailing: EPA-R6-2016-007493%20R6%20-%20Control%20Sheet.pdf

OK—cool—I am doing that.

From: Jones, Bruced
Sent: Tuesday, June 14, 2016 10:38 AM
To: Sales, James <sales.james@epa.gov>
Subject: RE: Emailing: EPA-R6-2016-007493%20R6%20-%20Control%20Sheet.pdf

Well the good news in that you are protected from being a witness in a private lawsuit under 40 CFR part 2.

Bad news is that you still have to respond to the FOIA request with all relevant and non- exempt information.

Bruce Jones
US EPA Region 6
1445 Ross Ave
Dallas, TX 75202
214 665-3184

From: Sales, James
Sent: Tuesday, June 14, 2016 10:31 AM
To: Jones, Bruced <Jones.Bruced@epa.gov>
Subject: FW: Emailing: EPA-R6-2016-007493%20R6%20-%20Control%20Sheet.pdf
Importance: High

FYI—

The FOIA request is from a law firm in LA. This EPA approval was for a PCB soil cleanup site in Texas owned by Anadarko that used a sub-contractor from LA. I suspect this law firm may be representing an employee of that sub-contractor who called me anonymously last year to report that the sub-contractor was not following certain part of the approved plan which included not having employees clean their boots before leaving the facility (or wearing booties when necessary). This employee may be seeking some kind of lawsuit against the sub-contractor.

When we found out about this, Lou Roberts and myself contacted Anadarko and went over the allegations. They did admit that not all parts of the plan were being followed, including not ensuring that trucks were thoroughly washed before leaving the facility, and possibly not having employees boots cleaned before leaving. Although, they insisted that they had given training and provided such equipment for the sub contractor to use.

So—I;m just hoping that if the law firm initiates some kind of suit (although I really don't see how they can prove any harm was done), I really don't want EPA—and myself—to get pulled into it.

Any thoughts?

From: Trim, JEWELINE

Sent: Monday, June 13, 2016 1:32 PM

To: Sales, James <sales.james@epa.gov>; Fruitwala, Kishor <Fruitwala.Kishor@epa.gov>; King, Laurie <king.laurie@epa.gov>; Smith, Melissa <Smith.Melissa@epa.gov>

Subject: FW: Emailing: EPA-R6-2016-007493%20R6%20-%20Control%20Sheet.pdf

Importance: High

Please see the attached FOIA request #007493, whereas, the Requester is requesting:

“Requesting information regarding the former Westlake Natural Gas Plant near Maryneal, Texas”

In checking RCRA Info, I'm not finding any information pertaining to Westlake Natural Gas. The Requester is asking for, among other things, documents relating to the remediation of PCBs at the Westlake site, as well as, any and all corrective action reports and/or corrective action plans concerning the Westlake site.

Please let me know if any of you/your team members would have any information for this site. **The due date is July 5, with a \$25 fee commitment.**

Thanks!

Jill Trim

Technical/Administrative Professional

Senior Environmental Employee

RCRA Branch

Multimedia Planning and Permitting Division

214-665-6564 * R6 6MM-RS

2 Chron.7:14

From: Bayless, Shirley

Sent: Monday, June 13, 2016 12:38 PM

To: Trim, JEWELINE <Trim.Jill@epa.gov>; Johnston, Carol <johnston.carol@epa.gov>; Vargo, Steve <Vargo.Steve@epa.gov>; Carroll, Craig <Carroll.Craig@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>; Stanton, Marya <Stanton.Marya@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>

Cc: Robinson, Jeffrey <Robinson.Jeffrey@epa.gov>

Subject: Emailing: EPA-R6-2016-007493%20R6%20-%20Control%20Sheet.pdf

This is a new FOIA request assigned to you. Could I get feedback by July 5?

Thank you,

Shirley Bayless

1445 Ross Ave.

6MM-RS

Dallas, TX 75202-2733

EPA Region 6

214-665-6562

bayless.shirley@epa.gov

Sales, James

From: Sales, James
Sent: Tuesday, June 14, 2016 10:31 AM
To: Jones, Bruce
Subject: FW: Emailing: EPA-R6-2016-007493%20R6%20-%20Control%20Sheet.pdf
Attachments: EPA-R6-2016-007493%20R6%20-%20Control%20Sheet.pdf

Importance: High

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Any thoughts?

From: Trim, JEWELINE
Sent: Monday, June 13, 2016 1:32 PM
To: Sales, James <sales.james@epa.gov>; Fruitwala, Kishor <Fruitwala.Kishor@epa.gov>; King, Laurie <king.laurie@epa.gov>; Smith, Melissa <Smith.Melissa@epa.gov>
Subject: FW: Emailing: EPA-R6-2016-007493%20R6%20-%20Control%20Sheet.pdf
Importance: High

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Thanks!

Jill Trim
Technical/Administrative Professional
Senior Environmental Employee
RCRA Branch
Multimedia Planning and Permitting Division
214-665-6564 * R6 6MM-RS
2 Chron.7:14

From: Bayless, Shirley
Sent: Monday, June 13, 2016 12:38 PM
To: Trim, JEWELINE <Trim.Jill@epa.gov>; Johnston, Carol <johnston.carol@epa.gov>; Vargo, Steve <Vargo.Steve@epa.gov>; Carroll, Craig <Carroll.Craig@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>; Stanton, Marya <Stanton.Marya@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Cc: Robinson, Jeffrey <Robinson.Jeffrey@epa.gov>
Subject: Emailing: EPA-R6-2016-007493%20R6%20-%20Control%20Sheet.pdf

This is a new FOIA request assigned to you. Could I get feedback by July 5?

Thank you,
Shirley Bayless
1445 Ross Ave.
6MM-RS
Dallas, TX 75202-2733

EPA Region 6
214-665-6562
bayless.shirley@epa.gov

Sales, James

From: Sales, James
Sent: Friday, July 08, 2016 2:10 PM
To: Jones, Bruce
Cc: Fruitwala, Kishor
Subject: Westlake PCB remediation FOIA request

Bruce—that law office in Louisiana that sent a FOIA on the Westlake remediation site—the one where a contractor called anonymously to report they weren't following the plan and said they weren't told to clean up after the work day--
- called me and asked more questions about it.

I really don't want to talk to a law office on this. Next time they call—if they do—I want to refer the calls to you.

Their number is 318 237 1900

Sales, James

From: Sales, James
Sent: Tuesday, August 16, 2016 10:25 AM
To: Jones, Bruced
Subject: RE: How about 10:30

Just call

From: Jones, Bruced
Sent: Tuesday, August 16, 2016 10:20 AM
To: Sales, James <sales.james@epa.gov>
Subject: RE: How about 10:30

Do you want me to come down there?

Bruce Jones
US EPA Region 6
1445 Ross Ave
Dallas, TX 75202
214 665-3184

From: Sales, James
Sent: Tuesday, August 16, 2016 9:06 AM
To: Jones, Bruced <Jones.Bruced@epa.gov>
Subject: How about 10:30

How a

From: Jones, Bruced
Sent: Monday, August 15, 2016 5:34 PM
To: Sales, James <sales.james@epa.gov>
Subject: RE: Sorry-- I was in D.C. all last week--- let me know when you can talk

Let's talk tomorrow I have nothing on my calendar so pick a time.

Bruce Jones
US EPA Region 6
1445 Ross Ave
Dallas, TX 75202
214 665-3184

From: Sales, James
Sent: Monday, August 15, 2016 9:09 AM
To: Jones, Bruced <Jones.Bruced@epa.gov>
Subject: Sorry-- I was in D.C. all last week--- let me know when you can talk

Sales, James

From: Sales, James
Sent: Wednesday, August 31, 2016 11:57 AM
To: Jones, Bruce
Subject: FW: Emailing: EPA-R6-2016-009791%20R6%20-%20Control%20Sheet.pdf
Attachments: EPA-R6-2016-009791%20R6%20-%20Control%20Sheet.pdf

Got this in the mail. What di we do

From: Trim, JEWELINE
Sent: Wednesday, August 31, 2016 11:42 AM
To: Sales, James <sales.james@epa.gov>
Cc: Fruitwala, Kishor <Fruitwala.Kishor@epa.gov>
Subject: FW: Emailing: EPA-R6-2016-009791%20R6%20-%20Control%20Sheet.pdf

Hi James,

Can you please take a look at this FOIA request (#9791) and let me know if you have any information on this. I did look in RCRA Info, and there's nothing in Maryneal, Texas for Westlake Natural Gas Plant.

Thanks!

Jill Trim
Technical/Administrative Professional
Senior Environmental Employee
RCRA Branch
Multimedia Planning and Permitting Division
214-665-6564 * R6 6MM-RS
2 Chron.7:14

From: Bayless, Shirley
Sent: Monday, August 29, 2016 11:10 AM
To: Trim, JEWELINE <Trim.Jill@epa.gov>
Subject: Emailing: EPA-R6-2016-009791%20R6%20-%20Control%20Sheet.pdf

Jill,

I believe this is the FOIA request that we were waiting for regarding PCBs (Jim Sales).

This is a new FOIA request assigned to you. Could I get feedback by Sep. 21?

Thank you,
Shirley Bayless
1445 Ross Ave.

6MM-RS
Dallas, TX 75202-2733

EPA Region 6
214-665-6562
bayless.shirley@epa.gov

Sales, James

From: Sales, James
Sent: Thursday, September 01, 2016 9:40 AM
To: Jones, Bruce
Subject: Call me when you get a chance

Sales, James

From: Sales, James
Sent: Monday, September 12, 2016 12:22 PM
To: Jones, Bruce
Subject: You in today?

Sales, James

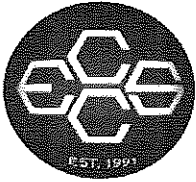
Subject: Anadarko Westlake Project Status Update Meeting
Location: EPA Office - Dallas, Texas

Start: Thu 9/29/2016 10:00 AM
End: Thu 9/29/2016 11:00 AM
Show Time As: Tentative

Recurrence: (none)

Organizer: Noonan, Brian

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2525 Advance Road
Madison, WI 53718
608.221.8700 Phone
608.221.4889 Fax

April 28, 2015

Kurt Webber
AECOM
16000 Dallas Parkway, Suite 350
Dallas, TX 75248
RE: Former Westlake Gas Plant - Maryneal, TX

Enclosed are the analytical results for the samples received by the laboratory on 03/25/2015.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. These results are in compliance with the 2009 NELAP Standards and the appropriate agencies listed below, unless otherwise noted in the case narrative. This analytical report should be reproduced in its entirety.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Richard Johnson For Jessica Esser
Project Manager

Certification List

TCEQ TCEQ NELAP Accreditation

Expires

T104704504-14-11/30/2015



2525 Advance Road
Madison, WI 53718
608.221.8700 Phone
608.221.4889 Fax

AECOM
16000 Dallas Parkway, Suite 350
Dallas TX, 75248

Project: Former Westlake Gas Plant - Maryneal, TX
Project Number: 2717
Project Manager: Kurt Webber

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BLANK	N151302-01	Wipe	03/25/2015	03/25/2015
L. BUCKET	N151302-02	Wipe	03/25/2015	03/25/2015



2525 Advance Road
Madison, WI 53718
608.221.8700 Phone
608.221.4889 Fax

AECOM
16000 Dallas Parkway, Suite 350
Dallas TX, 75248

Project: Former Westlake Gas Plant - Maryneal, TX
Project Number: 2717
Project Manager: Kurt Webber

BLANK
N151302-01 (Wipe)

Date Sampled
03/25/2015 10:17

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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ECCS - Lab #14

Polychlorinated Biphenyls by EPA Method 8082

Preparation Batch: N503019

PCB-1016	ND	0.50	ug/Wipe	1	03/25/2015	03/25/2015 13:25	EPA 8082A
PCB-1221	ND	1.0	ug/Wipe	1	03/25/2015	03/25/2015 13:25	EPA 8082A
PCB-1232	ND	0.50	ug/Wipe	1	03/25/2015	03/25/2015 13:25	EPA 8082A
PCB-1242	ND	0.50	ug/Wipe	1	03/25/2015	03/25/2015 13:25	EPA 8082A
PCB-1248	ND	0.50	ug/Wipe	1	03/25/2015	03/25/2015 13:25	EPA 8082A
PCB-1254	ND	0.50	ug/Wipe	1	03/25/2015	03/25/2015 13:25	EPA 8082A
PCB-1260	ND	0.50	ug/Wipe	1	03/25/2015	03/25/2015 13:25	EPA 8082A
Total PCBs	ND	0.50	ug/Wipe	1	03/25/2015	03/25/2015 13:25	EPA 8082A
Surrogate: Decachlorobiphenyl		79.7 %	60-140		03/25/2015	03/25/2015 13:25	EPA 8082A
Surrogate: Tetrachloro-meta-xylene		97.4 %	60-140		03/25/2015	03/25/2015 13:25	EPA 8082A



2525 Advance Road
Madison, WI 53718
608.221.8700 Phone
608.221.4889 Fax

AECOM
16000 Dallas Parkway, Suite 350
Dallas TX, 75248

Project: Former Westlake Gas Plant - Maryneal, TX
Project Number: 2717
Project Manager: Kurt Webber

L. BUCKET
N151302-02 (Wipe)

Date Sampled
03/25/2015 10:17

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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ECCS - Lab #14

Polychlorinated Biphenyls by EPA Method 8082

Preparation Batch: N503019

PCB-1016	ND	0.50	ug/Wipe	1	03/25/2015	03/25/2015 10:55	EPA 8082A
PCB-1221	ND	1.0	ug/Wipe	1	03/25/2015	03/25/2015 10:55	EPA 8082A
PCB-1232	ND	0.50	ug/Wipe	1	03/25/2015	03/25/2015 10:55	EPA 8082A
PCB-1242	ND	0.50	ug/Wipe	1	03/25/2015	03/25/2015 10:55	EPA 8082A
PCB-1248	ND	0.50	ug/Wipe	1	03/25/2015	03/25/2015 10:55	EPA 8082A
PCB-1254	3.3	0.50	ug/Wipe	1	03/25/2015	03/25/2015 10:55	EPA 8082A
PCB-1260	ND	0.50	ug/Wipe	1	03/25/2015	03/25/2015 10:55	EPA 8082A
Total PCBs	3.3	0.50	ug/Wipe	1	03/25/2015	03/25/2015 10:55	EPA 8082A
<i>Surrogate: Decachlorobiphenyl</i>		86.3 %	60-140		03/25/2015	03/25/2015 10:55	EPA 8082A
<i>Surrogate: Tetrachloro-meta-xylene</i>		102 %	60-140		03/25/2015	03/25/2015 10:55	EPA 8082A



2525 Advance Road
Madison, WI 53718
608.221.8700 Phone
608.221.4889 Fax

AECOM
16000 Dallas Parkway, Suite 350
Dallas TX, 75248

Project: Former Westlake Gas Plant - Maryneal, TX
Project Number: 2717
Project Manager: Kurt Webber

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control
ECCS - Lab #14

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch N503019 - EPA 3580A

Blank (N503019-BLK1)

Prepared: 03/25/2015 Analyzed: 03/25/2015 12:35

PCB-1016	ND	0.60	ug/Wipe							
PCB-1221	ND	1.2	ug/Wipe							
PCB-1232	ND	0.60	ug/Wipe							
PCB-1242	ND	0.60	ug/Wipe							
PCB-1248	ND	0.60	ug/Wipe							
PCB-1254	ND	0.60	ug/Wipe							
PCB-1260	ND	0.60	ug/Wipe							
Total PCBs	ND	0.60	ug/Wipe							
Surrogate: Decachlorobiphenyl	0.626		ug/Wipe	0.7920		79.0	60-140			
Surrogate: Tetrachloro-meta-xylene	0.565		ug/Wipe	0.6000		94.2	60-140			

LCS (N503019-BS1)

Prepared: 03/25/2015 Analyzed: 03/25/2015 13:00

PCB-1242	0	0.60	ug/Wipe				70-130			
PCB-1248	0	0.60	ug/Wipe				70-130			
PCB-1254	10.2	0.60	ug/Wipe	10.00		102	70-130			
PCB-1260	0	0.60	ug/Wipe				70-130			
Surrogate: Decachlorobiphenyl	0.625		ug/Wipe	0.7920		78.9	60-140			
Surrogate: Tetrachloro-meta-xylene	0.560		ug/Wipe	0.6000		93.3	60-140			



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Project: Former Westlake Gas Plant - Maryneal, TX

Project Number: 2717

Project Manager: Kurt Webber

Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. If the word 'dry' does not appear after the units, results are reported on an as-is basis.

RPD Relative Percent Difference



Prepared for:
Anadarko Petroleum Corporation
The Woodlands, Texas

Prepared by:
AECOM
Houston, TX
60335556 Task 3
December 2014

Texas Pollutant Discharge Elimination System Construction General Permit Storm Water Pollution Prevention Plan

Former Westlake Natural Gasoline Plant Nolan County, Texas



Prepared for:
Anadarko Petroleum Corporation
The Woodlands, Texas

Prepared by:
AECOM
Houston, TX
60335556 Task 3
December 2014

Texas Pollutant Discharge Elimination System Construction General Permit Storm Water Pollution Prevention Plan

Former Westlake Natural Gasoline Plant Nolan County, Texas

A handwritten signature in black ink, appearing to read "Emile Hanna". The signature is written in a cursive style with a large initial "E".

Prepared By: Emile Hanna
Project Manager

A handwritten signature in black ink, appearing to read "Kurt Webber". The signature is written in a cursive style with a large initial "K".

Reviewed By: Kurt Webber
Project Manager

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List of Acronyms

BMP	Best Management Practice
CFR	Code of Federal Regulations
CWA	Clean Water Act
EAPP	Edwards Aquifer Protection Plan
EPA	Environmental Protection Authority
HASP	Health and Safety Plan
GP	General Permit
NAICS	North American Industry Classification System
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupational Safety and Health Act
PPT	Pollution Prevention Team
SIC	Standard Industrial Classification
SPCC	Spill Prevention Control and Countermeasure
SWPPP	Storm Water Pollution Prevention Plan
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TMDL	Total Maximum Daily Load
TPDES	Texas Pollutant Discharge Elimination System
TWC	Texas Water Code
TWDB	Texas Water Development Board
U.S.	United States
USDA	United States Department of Agriculture

Storm Water Pollution Prevention Plan Record of Revisions

Former Westlake Natural Gasoline Plant
Nolan County, Texas

Revision No.	Revision Date	Description of Revision	Replaced Page(s)
0	December 2014	Prepared Construction SWPPP for a Small Construction Site according to the requirements of the General Permit	All

Project Information

Name: Former Westlake Natural Gasoline Plant

Location: South-Central Nolan County, Texas

Latitude: 32.291597 N (Decimal Degrees)

Longitude: -100.451378 W (Decimal Degrees)
(The coordinates were obtained from Google Earth)

Description:

This Construction Storm Water Pollution Prevention Plan (SWPPP) was prepared as part of the remediation activities associated with polychlorinated biphenyls (PCBs) impacted soil (herein referred to as the construction activity) at the former Westlake Natural Gasoline Plant soil (herein referred to as the site) located in Nolan County, Texas.

The SWPPP was prepared according to the guidelines of the Texas Pollution Discharge Elimination System (TPDES) General Permit No. TXR150000, effective March 5, 2013 under the provisions of Section 402 of the Clean Water Act (CWA) and Chapter 26 of the Texas Water Code (TWC).

The site is located on a 44-acre tract of land approximately 4.5 miles north of the town of Maryneal in Nolan County, Texas. The site's general location and the surrounding topographic features are shown on the site location map in Figure 1. The site's general layout map shows the extent of the project's disturbed area as indicated in Figure 2. Additional drawings as related to the soil remediation activities are provided in Appendix A.

Objectives:

The objectives of this SWPPP are to:

- Identify the potential sources of storm water pollution that are reasonably expected to affect the quality of storm water discharges during the construction activity; and
- Describe the Best Management Practices (BMPs) to be implemented during the construction activity to reduce the pollutants in storm water discharges.

This SWPPP describes the following information:

- Project/Site Information;
- BMPs, including erosion and sediment controls, stabilization practices, and other administrative controls as needed;
- Spill prevention and response;
- Inspection and maintenance requirements; and
- SWPPP updates and training requirements.

Project Duration:

Project Start Date: December, 2014

Anticipated Project End Date: February, 2015

Owner / Operator Information:

The following is a summary of personnel responsible for the development, implementation, maintenance and revisions of this SWPPP.

- **Project Owner**

Anadarko Petroleum Corporation
1201 Lake Robbins Dr.
The Woodlands, Texas 77380

Contact Owner

Ross Haeberle
Project Manager
Phone: (936) 446-8430

- **Primary Operator**

JWS Restoration Services, Inc.
Slade Jordan
Phone: (318) 381-1821

Site Superintendent

Scott Hansen
Phone: (618) 534-7163

Construction Project Manager

Slade Jordan
Phone: (318) 381-1821

The Primary Operator will be in charge of all aspects of the Construction SWPPP.

- **Engineer of Record**

AECOM Technical Services, Inc.
16000 Dallas Parkway, Suite 350
Dallas, Texas 75248

Contact Name

Kurt Webber, P.G.
Project Manager
Phone: (972) 735-7067
Cell Phone: (972) 773-6921

1.0 Introduction

1.1 Regulatory Background

The 1972 Federal Water Pollution Control Act, also known as the Clean Water Act (CWA) prohibits the discharge of any pollutant to waters of the United States from a point source unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. NPDES is the federal regulatory program to control discharges of pollutants to surface waters of the United States.

On September 14, 1998, the U.S. Environmental Protection Agency (EPA) authorized Texas to implement the Texas Pollutant Discharge Elimination System (TPDES) program to carry out the NPDES program in the state. The TPDES program is administered by the Texas Commission on Environmental Quality (TCEQ) and applies to all permitting, inspections, wastewater effluent monitoring, and enforcement associated with discharges of industrial waste and storm water runoff from industrial and construction activities. The TPDES Construction General Permit (GP) TXR150000 authorizes the discharge of storm water associated with construction activities. This general permit became effective on March 5, 2013 and will expire in five years.

The TPDES GP requires nearly all construction site operators engaged in clearing, grading, and excavation activities that disturb one to five acres, to obtain coverage for storm water discharges and develop a Storm Water Pollution Prevention Plan (SWPPP). In addition, construction sites that are larger than five acres must prepare and submit to TCEQ a Notice of Intent (NOI) and pay the associated fees, prior to discharging storm water runoff.

This SWPPP was prepared in compliance with the TPDES GP to authorize the discharge of storm water from a small construction site since total disturbed area is approximately two acres. In order to maintain compliance with the TPDES GP, implementation of the SWPPP will begin prior to the initial clearing, grubbing, and grading operations since these activities increase the potential for soil erosion at the site.

1.2 Site Background

The former natural gas plant was constructed by Westlake Natural Gasoline Company in the mid 1950's that processed and treated natural gas provided from the surrounding oil and gas production facilities. Several companies operated the gas plant until it was decommissioned and ultimately acquired by Anadarko Petroleum Corporation (Anadarko) in 2006.

Based on the historical information, and subsequent soil investigations, several on-site and offsite locations were impacted with PCBs. The construction activity includes excavation of PCB impacted-soils, temporary staging of PCB impacted-soils in stockpiles, and offsite disposal. This SWPPP was prepared to identify the construction activity that could adversely impact storm water discharges and to describe the control practices that will be implemented to reduce storm water pollution.

The *Remedial Action Plan (RAP)* prepared by AECOM Technical Services, Inc. (AECOM), May 2014, includes additional site-specific information as related to site history, environmental assessment, and remedial action objectives.

1.3 Obtaining Authorization to Discharge

The Primary Operator of small construction activities (including clearing, grading and excavation activities) qualify for coverage under the general permit provided that all the following conditions are met:

- The Construction SWPPP is implemented according to the provisions of the general permit; and
- The site notice is posted in a location where it is safely and readily available for viewing by the general public, local, state and federal authorities until completion of the construction activities.

As part of obtaining coverage under the general permit, a small construction site notice, included in Appendix B, and is completed, signed, certified, and posted near the main entrance of the construction site. The notice is signed and certified by a person and in the manner required by 30 Texas Administrative Code (TAC) §305.44 (relating to Signatories to Applications).

30 TAC §305.44 (a) All applications shall be signed as follows.

- (1) *For a corporation, the application shall be signed by a responsible corporate officer. For purposes of this paragraph, a responsible corporate officer means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. Corporate procedures governing authority to sign permit or post-closure order applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.*

The notice is readily available for viewing by the general public and local, state, and federal authorities. The notice will contain the following information:

- Operator name and contact information;
- Project location, start up and end dates; and
- Location of the SWPPP.

The construction site notice will be maintained in that location until completion of construction activities.

1.4 Permit Applicability and Coverage

1.4.1 Storm Water Discharges Eligible for Authorization

Discharges of storm water runoff from the construction activity are authorized under the general permit as long as the appropriate controls and measures are implemented as described in this SWPPP to reduce erosion and the discharge of pollutants in storm water from the construction site.

1.4.2 Allowable Sources of Non-Stormwater Discharges

Allowable sources of non-storm water discharges within the permit coverage area include the following:

- (a) Discharges from firefighting activities (firefighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, and similar activities);
- (b) Uncontaminated fire hydrant flushings (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life), which include flushings from systems that utilize potable water, surface water, or groundwater that does not contain additional pollutants (uncontaminated fire hydrant flushings do not include systems utilizing reclaimed wastewater as a source water);
- (c) Water from the routine external washing of vehicles, the external portion of buildings or structures, and pavement, where detergents and soaps are not used, where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed; and if local state, or federal regulations are applicable, the materials are removed according to those regulations), and where the purpose is to remove mud, dirt, or dust;
- (d) Uncontaminated water used to control dust;
- (e) Potable water sources including waterline flushings, but excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life;
- (f) Uncontaminated air conditioning condensate;
- (g) Uncontaminated ground water or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents; and
- (h) Lawn watering and similar irrigation drainage

1.4.3 Post Construction Discharges

Storm water discharges that occur after the construction activities are complete and after final site stabilization, are not eligible for coverage under this general permit and must be authorized under a separate permit if needed. The site notice will be removed within 30 days after final stabilization has been achieved on all portions of the site that are the responsibility of JWS Restoration Services, Inc.

1.5 Responsibility of Operators

The Primary Operator with day-to-day operational control over the construction activities will properly operate and maintain facilities and systems of control which are installed or used to achieve compliance with the conditions of the general permit. In addition, steps will be taken to minimize or prevent any discharge in violation of the general permit that has a reasonable likelihood of adversely affecting human health or the environment. Project description and schedule, the implementation of adequate BMPs, and periodic maintenance and inspections, in addition to SWPPP training, revision and recordkeeping requirements are described in the following sections.

2.0 Project and Site Description

2.1 Construction activity description, and schedule

As a result of the historical release(s), surface soils (less than five feet below ground surface) were impacted with PCBs as shown on Figure 2. The objective of the remediation activities is to mitigate risks associated with PCB-impacted soils at the site by excavating, stockpiling and transporting impacted soils to an approved disposal facility.

The construction activity is scheduled to commence in December 2014 with an anticipated completion date of February 2015. A detailed implementation schedule that includes sequencing of the construction activity while the implementation of the BMPs are summarized in Section 3.0:

Preconstruction:

1. Site preparation, which will include establishing access, survey control, temporary facilities and marking planned work areas and vehicle traffic routes.

The excavation area will consist of approximately two acres and the construction activity will be accessed through an entrance gate located approximately 2.5 miles west of the site on the Farm-to-Market Road (FM) 608.

Site access is on gravel roads which will be improved to allow heavy vehicle traffic using caliche/gravel road base material.

2. Designating equipment staging areas and exclusion zones.
3. Installation of erosion and sediment control measures at the perimeter of the construction areas and as described in Section 3.0.
4. Protection of existing vegetation to remain, as applicable.

Remediation:

5. Clearing and grubbing.

Impacted areas will be cleared of vegetation as necessary for equipment access and soil excavation activities. Excavated tree root-balls will be initially stockpiled then transported and disposed offsite along with the impacted soil.

6. Topsoil stripping and excavation activities.

PCB-impacted soils will be excavated from the site as shown on Figure 2 and stockpiled in the Soil Management Area (SMA) prior to offsite disposal.

7. Stockpiling impacted soil.

In May 2011, the SMA was constructed on-site as part of the field-scale pilot study activities and encompasses an area of less than an acre. The SMA is a relatively flat area, surrounded by soil berms, and served as the location for trial screening of PCB-impacted soils. The SMA will be used as the stockpile/laydown area for PCB-impacted soil excavated during the construction activity and prior to offsite disposal.

8. Loading trucks for offsite disposal.

The loading area will be immediately adjacent to the SMA so that trucks are loaded directly.

9. Backfilling activities.

10. Decontamination activities.

A decontamination pad will be used for vehicle and equipment washing activities prior to leaving the site and will be located immediately adjacent to the SMA.

11. Installation of other controls as necessary during construction activity.

Interim Reclamation: (Commencing throughout project development)

12. Gravel surfacing of disturbed areas needed for vehicle parking, material staging, etc.

13. Seeding of disturbed areas not associated with construction activity, but related to vehicle parking, material staging, etc.

Final Reclamation:

14. Completing the current construction activity, demobilizing equipment, re-grading disturbed surfaces as necessary, and seeding all newly disturbed areas as needed.

2.2 Environmental Compliance

During the construction activities, if JWS stores, uses, transfers, or otherwise handles oil and/or oil-based products with a maximum above ground storage capacity greater than 1,320 gallons (in containers greater than 55-gallon storage capacity), then JWS will comply with the federal, state and local requirements as required under the Spill Prevention Control and Countermeasure (SPCC) Plan.

JWS will comply with federal, state and local regulations when disposing of waste materials generated from the construction activity. Common non-hazardous solid wastes generated during the Construction Activity may include concrete debris; vegetation; trees; and other non-impacted plaster; asphalt; plumbing fixtures and piping; non-asbestos insulation; roof coverings; metal scraps; and electrical wiring and components.

JWS will follow the appropriate hazardous waste management requirements for the hazardous wastes generated during the construction activity. Common hazardous wastes that could be generated include: used oil, hydraulic fuel, and diesel fuel; contaminated soils; waste paints, solvents, thinners, and resins; contaminated cleanup materials; and other wastes.

2.3 Site Maps

As part of the construction general permit requirements, the SWPPP includes a site location map which is shown in Figure 1, a site layout map which is shown in Figure 2

These figures show the following:

- Drainage patterns in areas where soil disturbance will occur;
- Locations of structural controls either planned or in place (i.e. BMPs that will be utilized for erosion and sediment control);
- Locations where temporary or permanent stabilization practices are expected to be used;

- Locations of construction support activities, including off-site activities, including material, waste, borrow, fill, or equipment storage areas; and
- Surface waters either at, adjacent, or in close proximity to the site.

2.4 Potential Pollution Sources

The SWPPP is prepared to identify and address potential sources of pollution that are reasonably expected to affect the quality of discharges from the construction activity, including material storage areas, soil stockpiles, equipment staging areas that are used as part of the project. The most common source of pollution during the construction activity is sediment resulting from the erosion of recently cleared and/or graded areas, excavation activities, cut/fill slopes and soil stockpiles. BMPs to address these potential pollutants are described in Section 3 below.

Potential sources of sediment include:

- Clearing and grubbing operations;
- Grading activities;
- Sand, fill dirt, or gravel stockpiles;
- Landscaping operations;
- Excavation operations; and
- Vehicle tracking.

Other potential sources of pollutants (such as oil and grease, metals and organics) include:

- Staging area – fueling activities, equipment maintenance, and temporary sanitary facilities; and
- Waste storage areas.

In general, waste-collection areas will be located away from storm water drainage ditches. Dumpsters will be located near the site entrance, on paved surfaces, to minimize traffic on disturbed soils as much as possible.

Table 1 summarizes the chemicals and/or materials that may contribute to storm water pollution.

Table 1 – Sources of Storm Water Pollutants

Material/Chemical	Physical Description	Storm Water Pollutants	Location
Soil/PCB	Solid organic chemical	PCBs	Impacted areas as shown on Figure 2.
Hydraulic oil/fluids	Brown oily petroleum hydrocarbon	Mineral Oil	Leaks or broken hoses from equipment
Gasoline	Colorless, pale brown or pink petroleum hydrocarbon	Benzene, ethyl benzene, toluene, xylene, MTBE	Leaks or broken hoses from vehicles
Diesel Fuel	Clear, blue-green to yellow liquid	Petroleum distillate, oil and grease, naphthalene, xylenes	Fueling area; Leaks or broken hoses from equipment

Material/Chemical	Physical Description	Storm Water Pollutants	Location
Antifreeze/coolant	Clear green/yellow liquid	Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc)	Leaks or broken hoses from equipment/vehicles
Waste materials	Various	Suspended, settled and/or floating solids, petroleum, toxic compounds	Staging area, dumpsters
Construction materials	Various	Petroleum, toxic compounds	Staging area
Sanitary toilets	Various colored liquid	Bacteria, parasites, and viruses	Staging area

2.5 Soils, Slopes, Vegetation and Drainage Patterns

According to the United States Department of Agriculture (USDA) National Resources Conservation Service soils map for Nolan County, Texas, the soil in the project area consists mostly of very gravelly clay loam (<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>).

Specifically, the site is located on top of the Ector Series soil classification and mainly consists of very shallow to shallow undulating to hilly, moderately permeable, loamy soils and is very gravelly. Typically, this soil has a surface layer of moderately alkaline, calcareous, dark brown very gravelly clay loam about 12 inches thick. The next soil layer is approximately six inches thick and is made up of hard, fractured limestone that contains secondary carbonates between crevices. The site soil is well drained; the surface storm water runoff is rapid; the rooting zone is very shallow; and, in general, the site is not suitable for cultivation. The site soil permeability is moderate and available water capacity is very low. Based on that, surface erosion hazard is severe and the soil-blowing hazard is slight.

The topography surrounding the construction activity generally ranges from relatively flat to steep slopes toward the south-southeast side and ultimately into Sweetwater Creek. Grading will be used to level areas of the site during the construction activity as needed.

According to precipitation data obtained from the Texas Water Development Board (TWDB) and from the National Oceanic Atmospheric Administration (NOAA), average annual precipitation in Nolan County, Texas is approximately 23 inches. Storm water that falls on the site drains into an unnamed drainage feature and flows to the south-southeast toward Sweetwater Creek as shown on Figure 2. Natural vegetation that can be found onsite consists primarily of native grasses, cedar trees and mesquite trees.

2.6 Limitations on Permit Coverage

2.6.1 Post Construction Discharges

Storm water discharges and other related non-storm water discharges that will occur after the completion of the construction activity are not eligible for coverage under this general permit and will be permitted under a separate TPDES permit, if needed.

2.6.2 Water Quality Standards

Discharges to surface water in the state that would cause, have the reasonable potential to cause, or contribute a violation of water quality standards or that would fail to protect and maintain existing designated uses are not eligible for coverage under this general permit. Discharges from the Construction Activity will flow toward an unidentified drainage feature that may ultimately flow toward the intermittent part of Sweetwater Creek, thence to the perennial part of Sweetwater Creek and then to Lake Trammel. It is not anticipated that the construction activity will cause or contribute to a violation of water quality standards or contribute to the impairment of a designated water use.

2.6.3 Impaired Receiving Waters and Total Maximum Daily Load Requirements

Discharges of pollutants to impaired water bodies for which there is a Total Maximum Daily Load (TMDL) are not eligible under the general permit unless they are consistent with the approved TMDLs.

In accordance with section 303(d)(1) of the CWA, and pursuant to the latest TCEQ and EPA approved CWA Section 303(d) List, Sweetwater Creek and Lake Trammel are unclassified water segments and do not have a TMDL identified or scheduled for these segments. Therefore no additional controls or monitoring will be required for the implementation of the SWPPP during the construction activity.

2.6.4 Endangered Species Act

Discharges that would adversely affect a listed endangered or threatened aquatic or aquatic-dependent species or its critical habitat are not authorized by this permit, unless the requirements of the Endangered Species Act are satisfied. According to the U.S. Fish and Wildlife Service Critical Habitat Portal, <http://ecos.fws.gov/crithab/> there are no critical habitats within the vicinity of the construction activity or its discharge. Based on that, discharges of storm water associated with the construction activity and other non-storm water discharges are not expected to adversely affect a listed endangered or threatened species or its critical habitat.

2.6.5 Edwards Aquifer Recharge or Contributing Zone

Storm water discharges associated with the construction activity and other non-storm water discharges from the site is not located within the Edwards Aquifer Recharge Zone or within that area upstream from the recharge zone and defined as the Contributing Zone.

Based on that, Anadarko is not required to comply, prepare and submit the Edwards Aquifer Protection Plan (EAPP) to TCEQ's Edward Aquifer Protection Program.

3.0 Pollution Prevention Measures and Controls

Pollution prevention measures and controls are utilized to reduce the potential for pollutants to contaminate storm water during the construction activity. Such control measures involve the diversion of storm water away from contaminants, maintenance activities that minimize the potential release of contaminants from containers, equipment, and other structures, and removal of pollutants from storm water once it has come in contact with contaminant sources. The measures and controls identified below are selected based on the assessment of on-site sources of contamination.

Pollution prevention measures and controls include BMPs, good housekeeping practices, structural control practices, and maintenance programs for controls. Additional measures and controls include spill response, employee training, periodic inspections, and recordkeeping.

3.1 Best Management Practices

BMPs are schedules of activities, prohibition of practices, maintenance procedures, erosion controls, local ordinances, stabilization practices, and other management practices that can reduce the potential for pollution. BMPs will be implemented as part of the construction activities to reduce potential pollutants in storm water discharges.

The site maps will be kept up-to-date showing structural and non-structural BMPs that may change in location as the work on the construction activity advances.

The location and type of BMPs are summarized below:

- The amount of disturbed area will be minimized to the construction support activities and natural vegetation will be kept in place as applicable;
- The transport of sediment from the construction site onto paved roads will be minimized by utilizing a stabilized construction entrance;
- Site clearing and grading activities will be scheduled in dry periods, when possible;
- Soil stockpiles and disturbed portions of the site where the construction activity temporarily cease will be temporarily stabilized no later than 14 days from the last construction activity to prevent rain from washing away sediment;
- Drainage ditches and the storm water runoff will be protected from disturbance or construction activity using the erosion and sediment controls described below;
- The exposed disturbed areas will be mulched, covered by vegetation, or otherwise stabilized as soon as alterations have been completed;
- The construction entrance will be routinely maintained and kept clean of debris and sediment; and
- Erosion and sediment controls will be inspected and maintained after every rainstorm event or on as needed basis.

3.1.1 Erosion Controls

Prior to initiating construction in a given area, the temporary erosion and sediment control practices will be in place for the area to be disturbed. This section discusses appropriate temporary erosion control practices that may be necessary for the construction activity.

Control measures are properly selected, installed, and maintained according to the manufacturer's or designer's specifications. Controls are developed to minimize the offsite transport of sediment, litter, construction debris, and construction materials.

As installed BMPs are evaluated during inspections, additional BMPs may be implemented to protect storm water. Soil erosion control measures are used to reduce the amount of soil particles carried offsite from a disturbed land area and deposited in receiving waters.

In order to maintain compliance with the GP, sediment will be retained onsite to the maximum extent practicable. Major erosion and sediment controls described below will be installed by the contractor or his subcontractors. If damaged or rendered ineffective, the erosion and sediment controls will be repaired or replaced immediately.

3.1.1.1 Erosion Control Practices

Non-structural BMPs are intended to reduce the generation and accumulation of pollutants, including sediment, from a construction site by stabilizing disturbed areas and preventing the occurrence of erosion. The following stabilization techniques are not only the most effective method for reducing soil loss, but they are normally the most cost effective due to low initial cost and reduced maintenance requirements.

Non-Structural BMPs that will be used at the site include:

- Employee and contractor training – Training programs educate employees and contractors to understand the requirements of the SWPPP as applicable to their roles and responsibilities. Training topics can include storm water management, potential contamination sources, and BMPs. Section 6.3 addresses the requirements associated with training requirements to maintain compliance with the GP.
- Scheduling – A schedule will be prepared by the contractor that includes sequencing the construction activity and the implementation of the erosion and sediment controls while taking local climate into consideration. The objective is to reduce the amount and duration of soil exposed to erosion, wind, rain, runoff, and vehicle tracking.
- Grading techniques – Land grading involves reshaping the ground surface to planned grades as determined by an engineering survey, evaluation, and layout. Techniques include proper cut and fill techniques to ensure stability, crowning or sloping to properly route runoff to outlets, surfacing with gravel to avoid mud and rutting, and surface roughening to reduce runoff velocity, trap sediment, and prepare the soil for seeding and planting.
- Mulching – Mulching uses various types of materials such as grass, hay, wood chips, wood fibers, or straw to stabilize soils by minimizing rainfall impact and reducing storm water runoff velocity. When used in combination with seeding or planting, mulching can aid plant growth by holding seeds, fertilizers, and topsoil in place as shown in Exhibit 1. Mulching is suitable for a soil disturbed area requiring temporary protection until permanent stabilization is established, such as prior to completing backfill activities.

- Seeding, Planting and Sodding – This involves actively establishing appropriate vegetative cover on disturbed areas. Vegetation reduces erosion and sedimentation by stabilizing disturbed areas in a manner that is economical, adaptable to site conditions, and allows selection of the most appropriate plant materials. Vegetation also absorbs the impact of raindrops, reduces the velocity of runoff, reduces runoff volumes by increasing water percolation into the soil, binds soil with roots, and protects soil from wind as shown in Exhibit 2.



Exhibit 1 – Application of typical erosion control straw/hay mulch.



Exhibit 2 – Application of vegetation along drainage ditch.

3.1.2 Stabilization Practices

The disturbed areas (except for the surface of dirt roads or those portions covered by a pavement or a structure) will be stabilized by re-vegetating through the process of seeding and planting. However, surface roughening, mulching, surfacing with gravel or slash, and/or other methods may be used in addition to re-vegetation. Structural controls (such as diversions, berms, and sediment traps) may be re-vegetated and used as permanent measures to minimize pollutants in storm water discharges that will occur after construction operations have been completed.

Soil stabilization controls will be implemented on all freshly graded slopes immediately following completion of the grading activity. Stabilization practices may be included, but are not limited to:

- Establishment of temporary vegetation
- Establishment of permanent vegetation
- Mulching
- Geotextiles
- Sod stabilization
- Vegetative buffer strips
- Protection of existing trees and vegetation

Stabilization measures will be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and except as provided below, will be initiated no more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.

- Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practicable.
- Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of the site.

After completion of final grading, the disturbed areas will be re-vegetated or stabilized via an equivalent process until areas not covered by impervious materials achieve vegetative density of 70% of the original vegetation density. The temporary soil erosion and sediment control measures will be disposed of within 30 days after final site stabilization is achieved. Trapped sediment and other disturbed soil areas resulting from the disposition of temporary measures will be permanently stabilized to prevent further erosion and sedimentation. Areas developed as stabilized unpaved surfaces, after interim reclamation, will also qualify as "finally stabilized." This includes road surfaces and portions of the surface that cannot be re-vegetated due to operational necessity, but does not include slopes, ditches, and other areas where re-vegetation is necessary. Stabilized unpaved surfaces will be prepared in such a way as to prevent ongoing erosion issues.

The following records relating to erosion control and stabilization practices will be maintained as part of this SWPPP:

- The dates when major grading activities occur;
- The dates when construction activities temporarily or permanently cease on a portion of the site; and
- The dates when stabilization measures are initiated.

3.1.3 Source Control Practices

Temporary facilities that have been installed at the site include a construction office trailer with power and sanitation hookups. A trailer to be used as an on-site soil analytical laboratory will be mobilized and located at the staging area, as shown on Figure 2. The staging area will also be used to store the on-site materials and equipment as well as temporary sanitary facilities and a dumpster for trash collection.

If fueling areas will be used within the staging area, appropriate storage containers and secondary containment structures (to include a double-walled tank) will be sized to contain 110 percent of the volume of the largest fuel storage container. The selection of containment equipment and its positioning and use will take into account all of the drip points associated with the fuel filling port and the hose from the fuel delivery truck. Construction crew personnel will attend to the fueling process and to address potential spills using applicable response material and equipment. Absorbent, spill-cleanup materials and spill kits will be available at each construction staging area as appropriate.

Spill prevention and response procedures are discussed in Section 4.0.

3.1.4 Structural Control Practices

Sediment controls handle sediment-laden storm water prior to it leaving the site. Structural controls are used to delay, capture, store, treat, or promote infiltration of storm water runoff.

Structural controls that may be used at the site include:

- Stabilized construction entrance – Construction entrance is a graveled area located at a point allowing vehicles ingress and egress of the construction site. These entrances are placed wherever traffic will leave a construction site and move directly onto an access road. The purpose of the stabilized construction entrance area is to eliminate construction site sediment and soil from leaving the site. The primary construction entrance road is shown on Figure 2. A gravel surface, or equivalent, will be installed at the construction entrance.

Exhibit 3 shows an example of a stabilized construction site entrance.

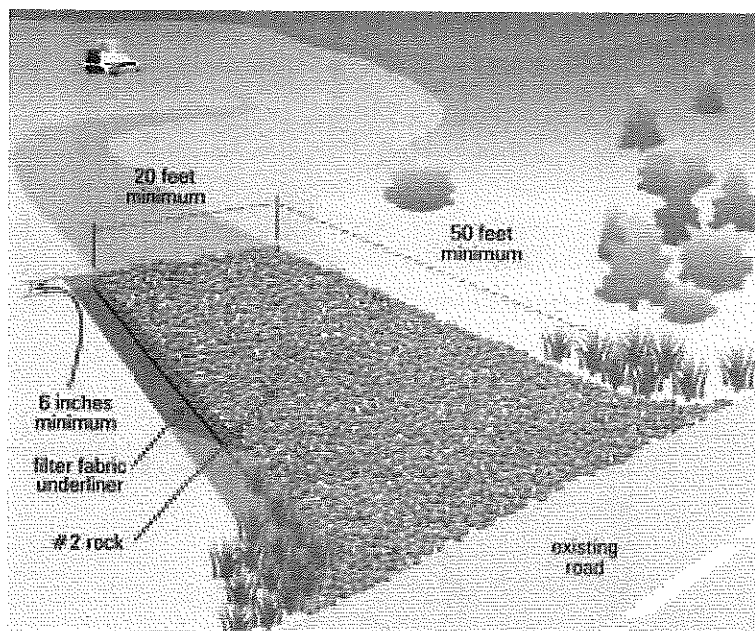


Exhibit 3 – Construction of stabilized construction site entrance.

Where sediment is transported onto a public road surface or other paved area by equipment or vehicles accessing the site, sediment will be removed as soon as possible from the road by shoveling or sweeping, and will be transported to the SMA. Road washing will be allowed only after the sediment is removed in the above manner.

- Straw Bale Barriers are a series of straw bales placed on a level contour to intercept sheet flows, allowing sediment to settle out. Straw bales consist of approximately five cubic feet of straw and weigh not less than 35 pounds. Bales will be placed in a single row with the end of the bales tightly abutting one another. Each bale will be securely anchored with two rods as site conditions allow.

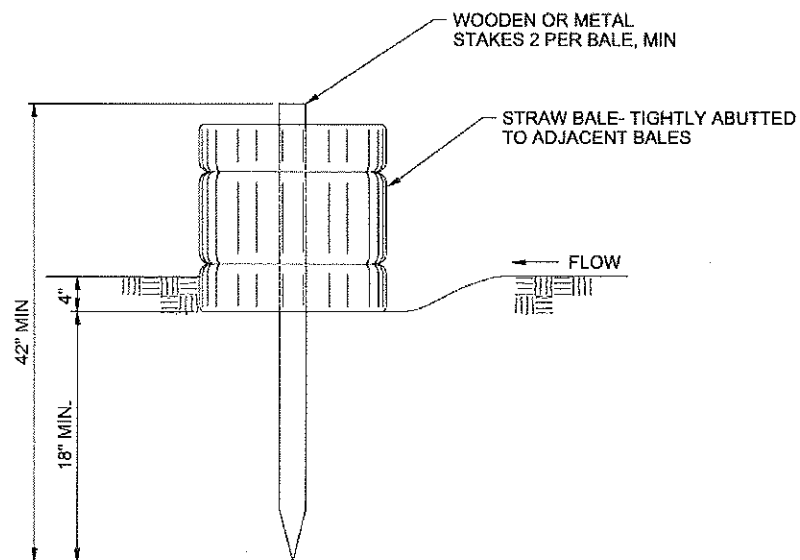
Straw bales will be installed on-site on flat level surfaces as shown on Figure 2.

It's important to note that straw bales may not be as effective as fiber rolls during heavy rain events or large disturbed areas. In addition, straw bales will require constant maintenance and must be inspected on a daily basis especially during rain events.

Exhibit 4 and Exhibit 5 show appropriate installation and entrenchment procedures



Exhibit 4: Typical Straw Bale Barrier



STRAW BALE BARRIER

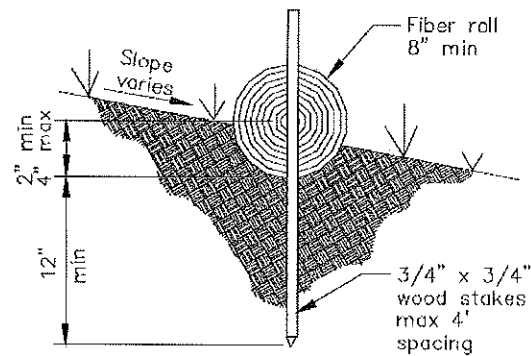
NTS

Exhibit 5: Application of Straw Bale

- Fiber Rolls, which are tube-shaped erosion control devices, filled with straw or other composted material wrapped with UV-degradable netting for longevity. Fiber rolls can complement other BMPs used for source control and re-vegetation. Fiber rolls intercept runoff, reduce its flow velocity, release the runoff as sheet flow, and reduce sediment loads to receiving waters by filtering runoff and capturing sediments. Fiber rolls will be used downgradient of the site along the upper gully area as shown on Figure 2.

Fiber rolls installed will be trenched in and staked using wooden stakes, and will remain in their original location without being moved or re-installed until final site stabilization is achieved.

Exhibit 6 and Exhibit 7 show appropriate installation and entrenchment procedures.



ENTRENCHMENT DETAIL
N.T.S.

Exhibit 6 – Application of fiber rolls

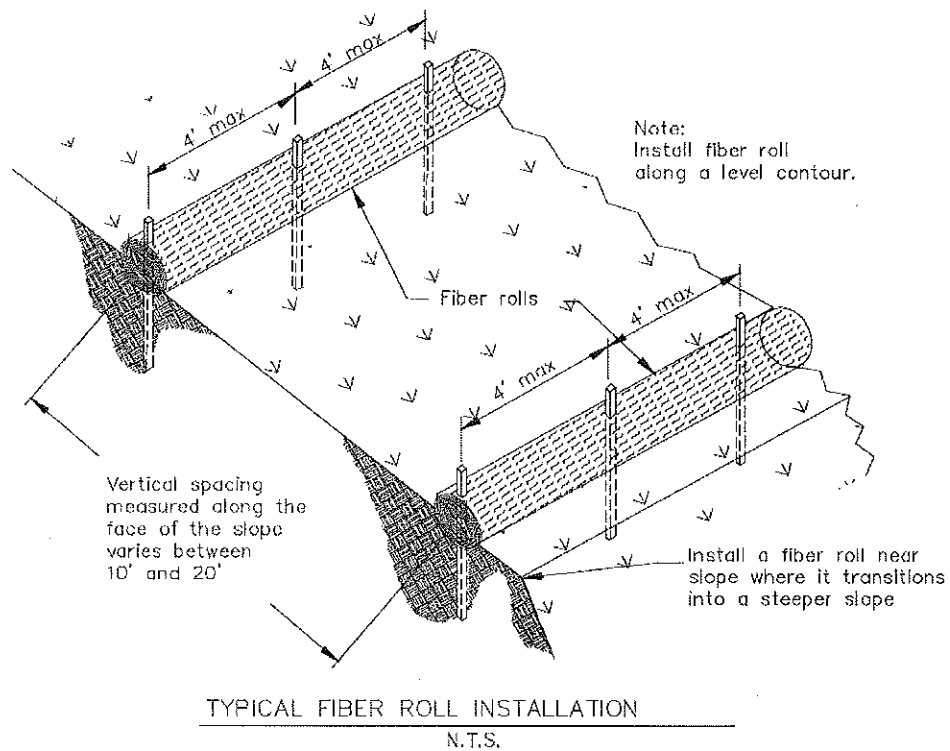


Exhibit 7: Typical Fiber Rolls Installation

- Check Dams are a small barrier constructed of rock, gravel bags, sandbags or reusable products placed across a constructed swale or drainage ditch. Check dams reduce the effective slope of the channel, thereby reducing the velocity of storm water flow, allowing sediment to settle and reducing erosion.
- Check dams will be installed as temporary measures and spaced at appropriate intervals along the construction activity and along the gully area as shown on Figure 2.

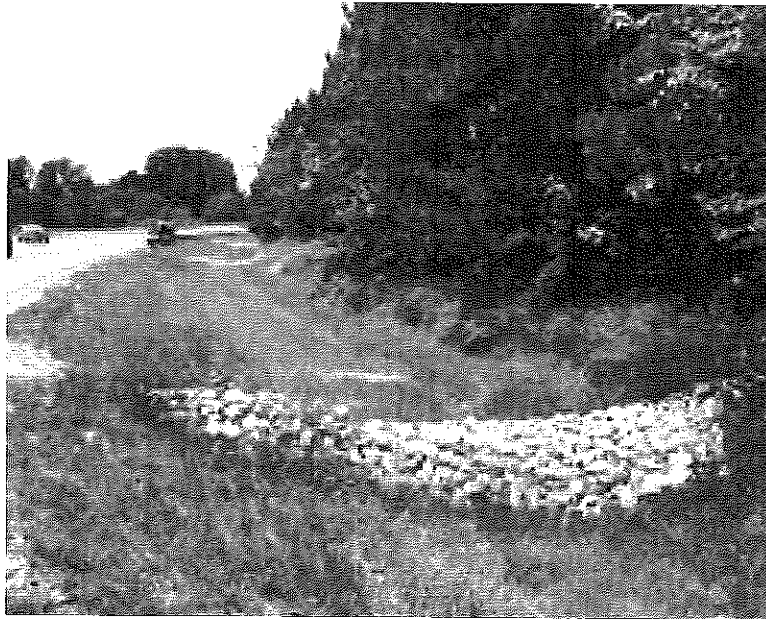


Exhibit 8: Typical Rock Check Dam

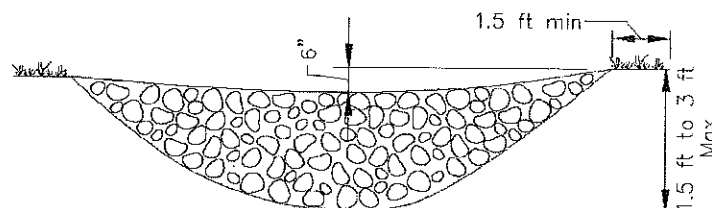
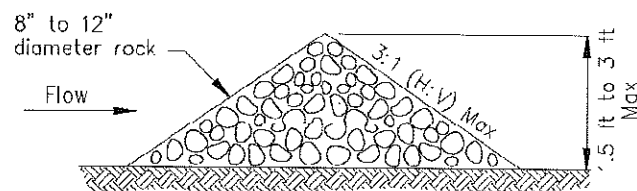
ELEVATIONTYPICAL ROCK CHECK DAM SECTIONROCK CHECK DAM
NOT TO SCALE

Exhibit 9: Application of Rock Check Dams

- Rip-Rap Slope Protection is constructed by an arranged layer or pile of rock placed over the soil surface on slopes and provides protection against slope erosion in addition to dissipating the energy of storm water runoff. A rip-rap slope protection will be constructed in the lower gully area and prior to storm water discharge into the surrounding ranch land as shown on Figure 2.

The rip-rap structure will be made of 4 to 12 inch rock diameter; 3 feet wide and at a depth of 18 inches by blending the rip-rap onto the existing ground.

Maintenance requirements are relatively low for the rip-rap structure, but it will be inspected after heavy rain events and high flows for scouring under the dislodged stones, and repairs must be completed promptly.

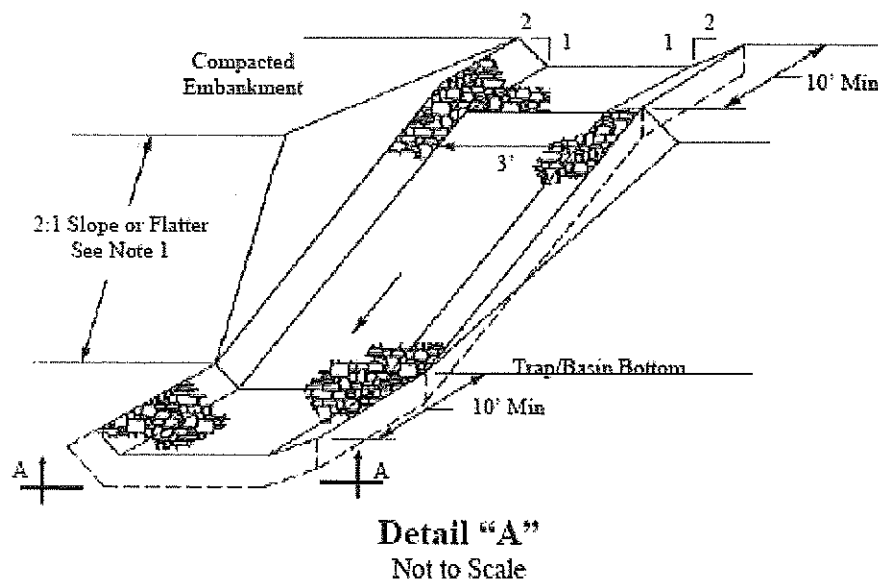


Exhibit 10: Application of Rip-Rap Slope Protection

- Storm water may accumulate in excavations or trenches during the construction activity, and will not be pumped or discharged to the surface without conducting further analysis and evaluation. Otherwise, storm water can be pumped into storage tanks prior to offsite disposal.
- Currently, storm water treatment systems will not be implemented.

At a minimum, BMPs, vegetative buffer strips, or equivalent sediment controls are required for all downgradient boundaries of the construction activity, and for those side slope boundaries deemed appropriate as dictated by site conditions.

3.1.5 Permanent Storm Water Controls

Permanent storm water controls will include planting the disturbed areas with native grasses that can provide flow attenuation and partial vegetative filtration as appropriate to the site.

No additional control measures will be installed during the construction project. Additional control measures required to manage the discharge of pollutants after the completion of the construction activity will be determined at a later stage as needed.

3.3 Other Controls

3.3.1 Good Housekeeping Practices

The proper use of materials and equipment along with the use of general common sense can greatly reduce the potential for contaminating storm water runoff. The following is a list of good housekeeping practices to be used during the construction project:

- Inspect the project area daily to assure proper use, storage, and disposal of onsite materials;
- Locate fuel/material storage areas away from storm water conveyance systems;
- Advise the Construction Manager immediately, verbally, and in writing, of any fuel or toxic material spills onto the project/construction area and the actions taken to remedy the problem. Spills that occur will be cleaned up immediately and reported as appropriate;
- Provide waste receptacles in staging areas and work trailers and dispose of waste regularly;
- Debris and waste will be properly disposed of according to the applicable federal, state, and local laws;
- Provide adequately maintained sanitary facilities;
- Drums and tanks (if any) will be tightly sealed and clearly labeled;
- Equipment used on-site will be regularly inspected;
- Construction materials will be stored in designated areas until these materials are required and will be loaded and off-loaded in designated area; and.
- Structures will be placed next to their installation locations to minimize handling.

3.3.2 Waste Management

- a) *Waste Materials:* To the maximum extent practicable, regular trash will be disposed of daily
- b) *Hazardous Waste:* Excavated PCB-impacted soil will be initially staged at the SMA prior to offsite disposal as detailed in the RAP. Excavated soil will be managed and classified properly, then disposed of in compliance with federal, state and local regulations as specified in the RAP.
- c) *Sanitary Waste:* Portable toilets will be located away from concentrated flow paths and traffic flow. The portable toilets will have collection pans underneath as secondary containment. All sanitary waste will be regularly collected from the portable units by a licensed sanitary waste management contractor.

3.3.3 Vehicle/Equipment Fueling and Maintenance

All on-site vehicles and equipment will be monitored for leaks and receive regular preventive maintenance to reduce the chance of storm water contamination. All major equipment/vehicle fueling

and maintenance will be performed off-site. When equipment/vehicle fueling or minor maintenance must occur on-site, the activity will occur per the BMP as noted in Section 3.1. Absorbent, spill-cleanup materials and spill kits will be available at the staging area. Drip pans will be placed under equipment during minor maintenance activities.

3.3.4 Allowable Non-Storm Water Discharge Management

Water may be used to control dust generated during the construction activities to prevent loss of soil surface, to reduce on-site and offsite damage, to prevent health hazards, and to improve traffic safety. Water will be applied in a controlled manner to reduce runoff.

If irrigation is required for stabilization, irrigation waters will not be applied to impermeable surfaces. Irrigation amounts will be controlled to avoid excess watering and discharges of irrigation water.

4.0 Spill Prevention and Response

4.1 Introduction

This section describes measures to prevent, control, and reduce impacts resulting from a spill of hazardous, toxic, or petroleum substances during construction activity. In the event of a spill, quick and appropriate response can reduce the contamination of storm water. The measures outlined in this SWPPP will assist the construction crew personnel in prevention of offsite releases.

Petroleum products which may be present at the construction site may include: gasoline, diesel, lube oil, in addition to miscellaneous hydraulic and used oils. Containers will be properly labeled and stored in a designated area within secondary containment as applicable. Fuel for vehicles and equipment will be transported and distributed via a fuel truck which will eliminate the need for on-site fuel tanks. During fueling and maintenance, drip pans, drip cloths, or sorbent pads will be used to capture fluids.

4.2 Spill Prevention

Procedures that can reduce the potential of spills from contaminating storm water include:

- Employee training;
- Placing oil, oil-based products and other chemicals inside secondary containment;
- Installation of overfill prevention devices on pumps and tanks;
- Modification of material handling techniques; and
- Routine inspection of vehicles and containers.

4.3 Labeling of Containers

Procedures implemented at the construction site will include that containers are properly labeled and include verification of proper labeling for in-coming and out-going containers.

4.4 Spill Response and Cleanup Procedures

The following items will be implemented in the event of a release or a reportable spill during the construction activity. Spill response and cleanup procedures are arranged in a step-wise fashion to ensure that actions follow a logical sequence in an effective manner. Although the construction crew personnel will be aware of these procedures in the event of an emergency, operational knowledge gained through employee training, will be used to modify the procedures listed below when unforeseen circumstances occur. No single set of procedures is applicable for all spill events.

The following is the overall procedure implemented for spill response:

1. Notify senior management – the first person on the scene will immediately notify responsible personnel using established procedures for emergency contact.

2. Assess the spill – those responsible for spill response will immediately determine:
 - The character, exact source, and amount of any released materials;
 - The need to notify authorities and regulatory agencies, and
 - The actions required to safeguard personnel (i.e., evacuation, personal protection, etc.)
3. Stop flow at source - after all required safety-related measures have been implemented, further release will be prevented, to the extent possible, by terminating flow at the source.
4. Contain the spill - after required safety precautions are followed, and the release is terminated, containment procedures will be implemented. Portable booms, sand bags, and absorbent may be placed around containment points such as perimeter drainage or storm water outfalls.
5. Clean up the spill - to the extent practicable, spilled material will be retrieved and stored in leak-proof containers until proper disposal takes place. Contaminated cleanup equipment will be properly decontaminated or disposed as appropriate. Depending upon the nature and extent of the release, the following procedures will be utilized:
 - Dry clean-up methods will be used, such as sweeping and absorbent pads;
 - When dry clean-up methods are not practical or the spilled substance is a liquid, booms will be used to prevent release of the substance to the storm sewer system; and
 - If appropriate, liquids generated by spills and clean-up activities will be disposed of through an appropriate contractor.
6. Dispose of contaminated material - contaminated material will be disposed of off-site in accordance with federal, state, and local regulations. The exact means of disposal will depend upon the nature and volume of the contaminated material.

PCB-impacted material will be managed according to the Toxic Substance Control Act (TSCA) found in Title 40 of the Code of Federal Regulations (CFR) Part 761.
7. Record spill event information – a record of the spill event will be completed as soon as practicable. The record will include as much detail as possible and, at a minimum, list the following:
 - Spill location, date, time, duration, and weather conditions;
 - Estimate of the type and amount of material spilled and recovered;
 - Brief description of the cause of the spill;
 - Summary of any environmental damage;
 - List of parties notified; and
 - Description of implemented response procedures.
8. Evaluate response – measures will be identified that might prevent a repeat of the incident.
9. Update the SWPPP –The SWPPP will be revised to reflect any site modifications or changes in operating procedures resulting from the evaluation of the incident and response.

10. Replace used spill equipment - the inventory of response materials and equipment will be assessed and restocked as necessary. The following items will be kept onsite:
- Absorbent "kitty litter" for oils and liquids;
 - Absorbent pads and blankets for oils and liquids;
 - Fire extinguishers;
 - Shovels; and
 - Miscellaneous clothes, rolls, and blankets.
11. Emergency Phone Numbers - the following telephone numbers are for notification in case of a reportable spill.
- Slade Jordan, JWS Construction Manager (318) 381-1821
- Kurt Webber, AECOM Project Manager..... (972) 735-7067; cell phone (817) 773-6921
- Ross Haeberle, Anadarko Project Manager..... (936) 446-8430
- Federal (National Response Center) 1-800-424-8802
- TCEQ Region 3 Office (Monday-Friday) (325) 698-9674; fax (325) 692-5869
- TCEQ Environmental Release Hotline 1-800-832-8224 (24 Hours)
- Local response officials (fire, police, etc.)..... 911
12. Reportable quantities (RQ) are identified in 30 TAC 327.4 and listed below:
- (a) Hazardous substances
- a. Onto land: Final RQ in Table 302.4 in 40 CFR 302.4;
 - b. Into water: Final RQ or 100 lbs., whichever is less if spilled or discharged directly into waters in the state.
- (b) Oil, petroleum product, and used oil
- 1) Crude oil (and oil that is neither a petroleum product nor used oil)
 - a. Onto land: 210 gallons if spilled or discharged onto land,
 - b. Into water: Quantity sufficient to cause a sheen if spilled or discharged directly into waters in the state.
 - 2) Petroleum products (e.g., gasoline, diesel) and used oil
 - c. Onto land: 25 gallons if spilled or discharged onto land,
 - d. Into water: Quantity sufficient to cause a sheen if spilled or discharged directly into waters in the state.
- (c) Industrial solid waste or other substances (TCEQ reportable)
- a. Into water: 100 pounds if spilled or directly discharged into waters in the state.

A reportable discharge or spill of these products is a discharge or spill into the environment in a quantity equal to or greater than those listed above in any 24-hour period.

5.0 Maintenance Requirements, Inspection of Controls, and Prohibited Discharges

5.1 Maintenance Requirements

The pollution prevention measures and controls identified in this SWPPP will be maintained in good operating condition and replaced as needed. If through inspections it was determined that the BMPs and structural controls are not operating effectively, maintenance will be performed before the next anticipated storm event to maintain the continued effectiveness of the storm water controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance will be scheduled and accomplished as soon as practicable. Erosion and sediment controls that have been intentionally disabled, run over, removed, or otherwise rendered ineffective will be replaced or corrected immediately upon discovery.

For perimeter controls such as straw bales and fiber rolls, the trapped sediment will be removed before it reaches 50% of the above-ground height of the perimeter control.

If sediment escapes the site, accumulations will be removed at a frequency that minimizes off-site impacts, and prior to the next rain event, as adequate. In this case, additional site assessment and remediation may be required for potential PCB-impacted media.

5.2 Inspection of Controls

The construction crew personnel knowledgeable of the SWPPP, will inspect the disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, and structural controls for evidence of, or the potential for, pollutants entering the drainage system. Sediment and erosion control measures identified in the SWPPP will be inspected to ensure that they are operating as intended. Locations where vehicles enter or exit the site will be inspected for evidence of off-site sediment tracking.

Inspections will be conducted once every 14 calendar days on a specifically defined day, regardless of whether or not there has been a rainfall event since the previous inspection, and within 24 hours of the end of a storm event of 0.5 inches or greater. In the event of flooding or other uncontrollable situations which prohibit access to the construction site, inspections will be conducted as soon as practicable. The Inspection Checklist is included in Appendix C.

The SWPPP will be modified based on the results of inspections, as necessary, to better control pollutants in runoff. Revisions to the SWPPP will be completed within 14 calendar days following the inspection. If existing BMPs are modified or if additional BMPs are necessary, an implementation schedule will be described in the SWPPP and wherever possible, those changes will be implemented before the next storm event or as soon as practicable.

A report summarizing the scope of the inspection, names and qualifications of personnel conducting the inspection, the dates of the inspection, and major observations relating to the implementation of the SWPPP will be made and retained as part of the SWPPP. Major observations will include:

- The locations of discharges of sediment or other pollutants from the construction site;
- The locations of pollution prevention measures and controls that need to be maintained;
- The locations of pollution prevention measures and controls that failed to operate as designed or proved inadequate for a particular location; and
- The locations where additional pollution prevention measures and controls are needed.

Actions taken as a result of the inspections will be described and retained as a part of the SWPPP. Reports must identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report must contain a certification that the facility or site is in compliance with the SWPPP and this permit. The report must be signed by the Primary Operator and in the manner required by 30 TAC §305.128 (relating to Signatories to Reports).

5.3 Prohibited Discharges

The following discharges are prohibited during the construction activities:

- Wastewater from wash out of trucks, unless managed by an appropriate control;
- Wastewater from wash out and cleanout of general construction materials;
- Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
- Soaps or solvents used in vehicle and equipment washing.

5.3.1 Concrete Truck Washout

The scope of work does not currently include concrete production, mixing or placement as related to the construction activity. However, if needed, the general permit authorizes the discharge of wash out water from concrete trucks, provided the following requirements are met:

- Direct discharge of concrete truck washout water to surface water in the state, including discharge to storm sewers, is prohibited by the general permit;
- Concrete truck washout water will be discharged to areas at the construction site where structural controls have been established to prevent direct discharge to surface waters, or to areas that have a minimal slope that allow infiltration and filtering of washout water to prevent direct discharge to surface waters. Structural controls may consist of temporary berms, temporary shallow pits, temporary storage tanks with slow rate release, or other reasonable measures to prevent runoff from the construction site; and
- Washout of concrete trucks during rainfall events will be minimized. The direct discharge of concrete truck washout water is prohibited at all times, and the operator will insure that its BMPs are sufficient to prevent the discharge of concrete truck washout as the result of a rain event.

6.0 Plan Revisions, Recordkeeping and Training

6.1 Revision of SWPPP

The SWPPP will be revised and updated as follows:

- There is a change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants and that has not been previously addressed in the SWPPP;
- Changing site conditions based on updated plans or specifications, new operators, new areas of the responsibility, and changes in BMPs; and
- Results of inspections or investigations by site operators, authorized TCEQ personnel, or federal, state or local agency approving sediment and erosion plans indicate the SWPPP is proving ineffective in eliminating or significantly minimizing pollutants in discharges authorized under this general permit.

6.2 Retention and Recordkeeping Requirements

The following records will be maintained and attached to the SWPPP in Appendix D, and will be made readily available upon request to state and local agencies when requested:

- The dates when major grading activities occur;
- The dates when construction activities temporarily or permanently cease on a portion of the site; and
- The dates when stabilization measures are initiated.

The Project Owner and/or the Primary Operator will retain the following records for a minimum of three years from the date coverage is terminated under the general permit:

- A copy of the SWPPP; and
- All reports and actions required by this permit, including a copy of the construction site notice and inspection forms.

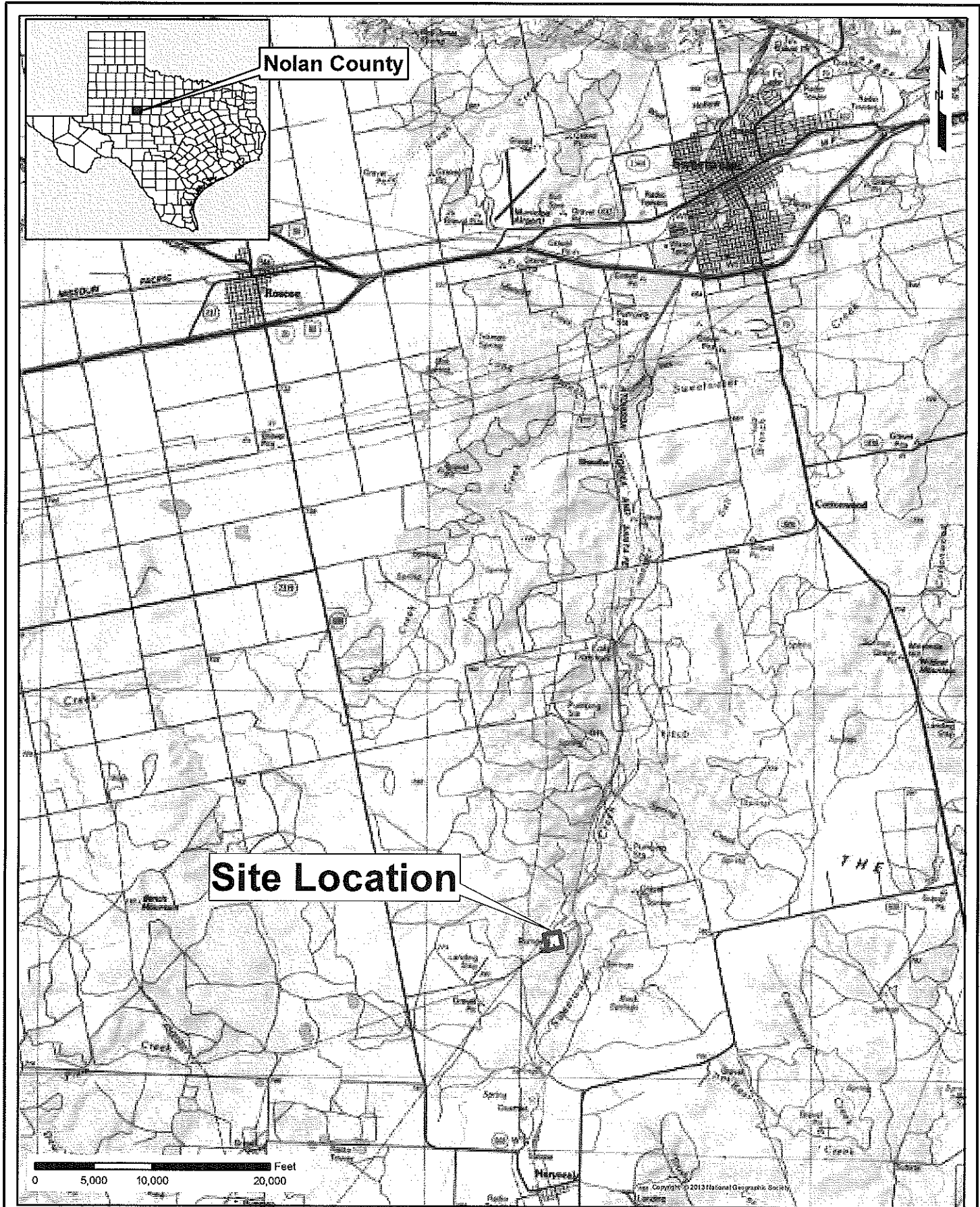
6.3 Contractor and Employee Training

All contractor and construction crew members will be initially trained on the requirements of the SWPPP and the implementation and maintenance of pollution prevention measures and controls upon initiating project work. The Training Records will be retained on-site and will be made available for inspection if needed. Changes to the BMPs will be communicated to site workers. Contractors participating in the SWPPP will complete the Contractor Certification form included in Appendix E. A training documentation record is included in Appendix F.

A copy of the complete general permit is included in Appendix G.

Completed Inspection Forms will be maintained in Appendix H.

Figures



Site Location Map
Former Westlake Natural Gasoline Plant
Anadarko Petroleum Corporation
Nolan County, TX

SCALE: As Shown DATE: May 2014 PROJECT #: 60269730

AECOM
16000 Dallas Parkway, Suite 350
Dallas, Texas 75248
T +1 972.735.3000
F +1 972.735.3001
WEB: [HTTP://WWW.AECOM.COM](http://www.aecom.com)

AECOM

NOTES:

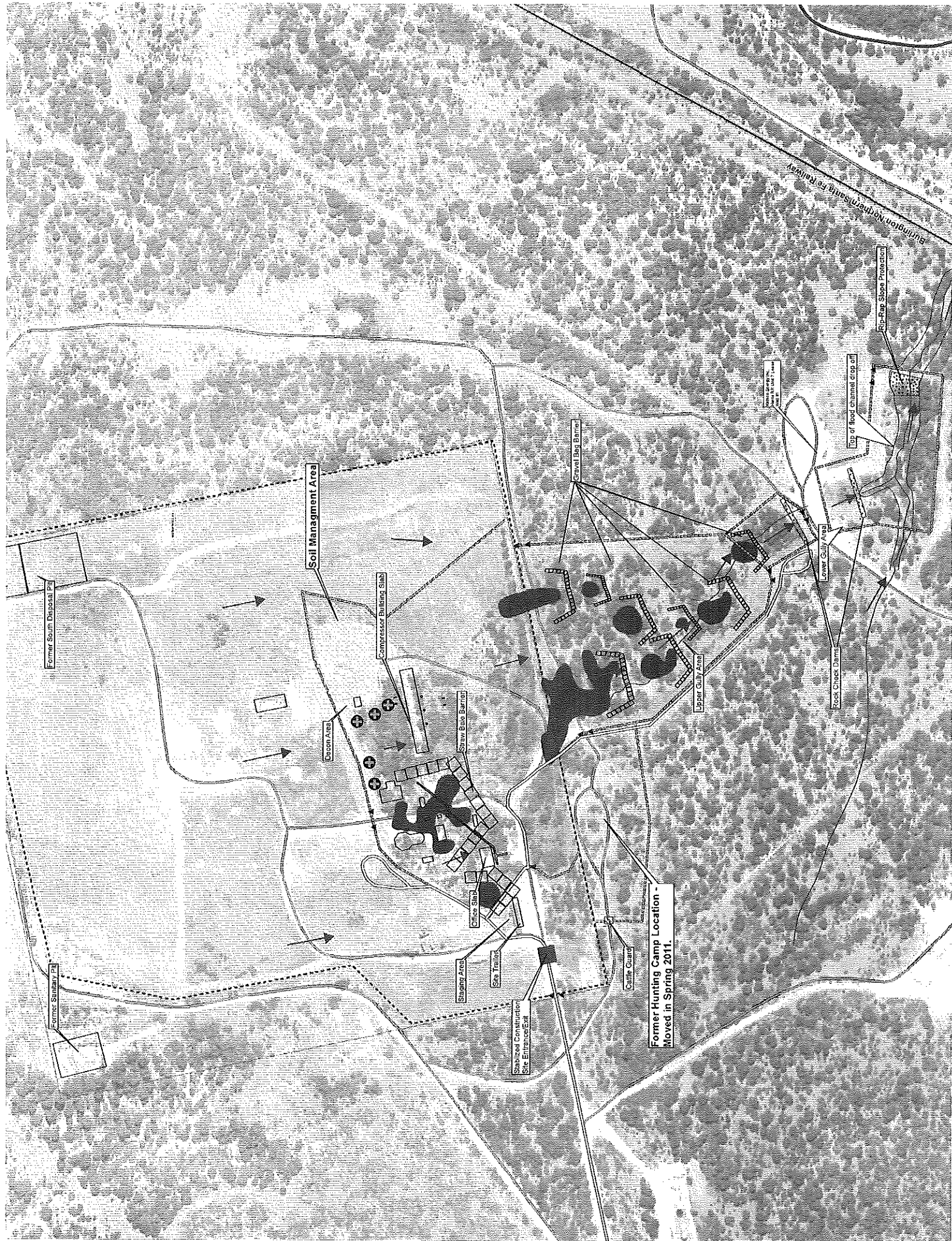
1. Base Image: USGS Topo Map

DRAWING NUMBER:

FIGURE 1

SHEET NUMBER:

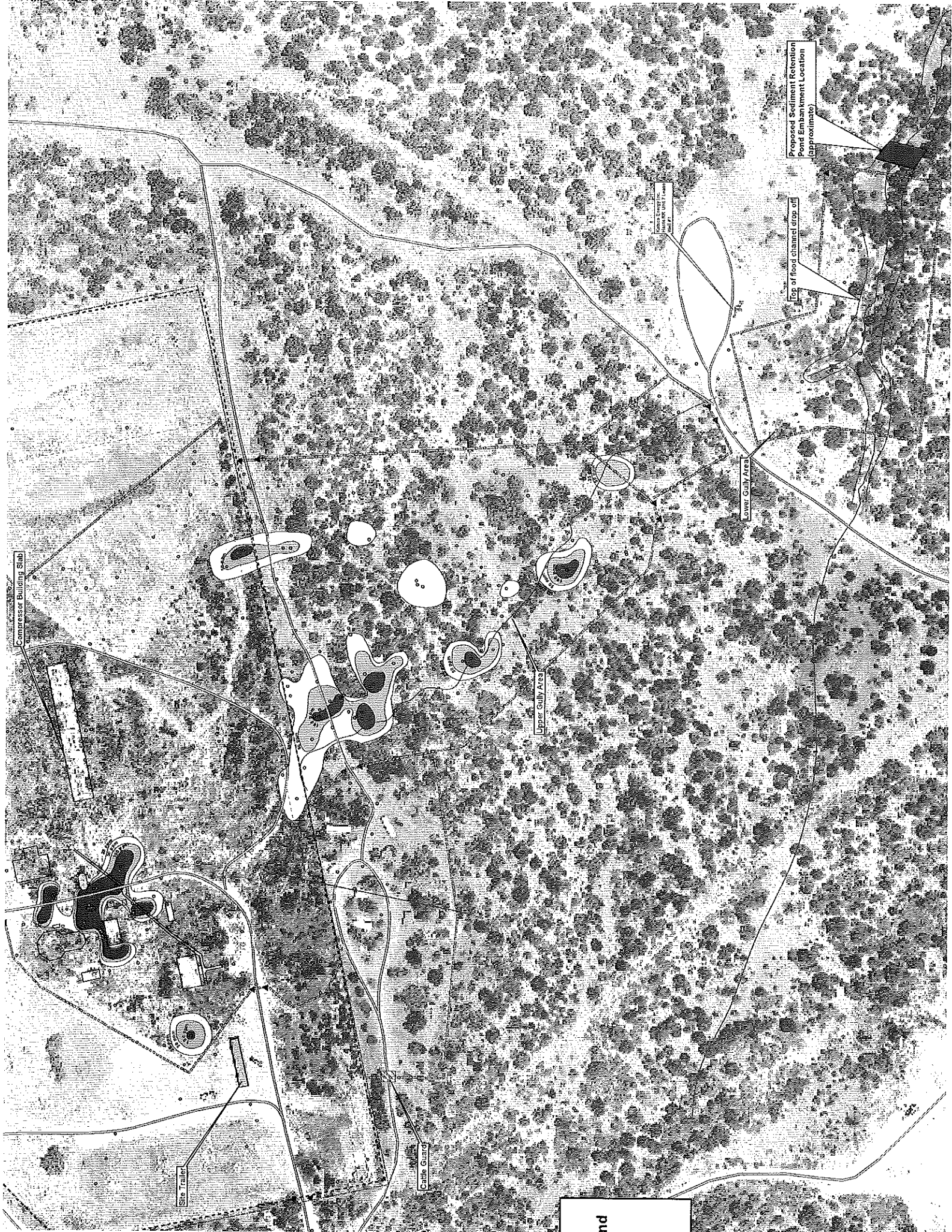
1 of 1



Appendix A

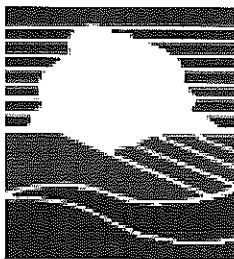
Remedial Action Plan Drawings





Appendix B

Small Construction Site Notice



SMALL CONSTRUCTION SITE NOTICE

FOR THE
Texas Commission on Environmental Quality (TCEQ)
Storm Water Program
TPDES GENERAL PERMIT TXR150000

The following information is posted in compliance with **Part II.E.2.** of the TCEQ General Permit Number TXR150000 for discharges of storm water runoff from small construction sites. Additional information regarding the TCEQ storm water permit program may be found on the internet at:

http://www.tceq.state.tx.us/nav/permits/wq_construction.html

Operator Name:	JWS Restoration Services, Inc.
Contact Name and Phone Number:	Slade Jordan (318) 381 - 1821
Project Description: <i>Physical address or description of the site's location, estimated start date and projected end date, or date that disturbed soils will be stabilized</i>	Former Westlake Natural Gasoline Plant located in South-Central Nolan County, Texas, approximately 4.5 miles north of the town of Maryneal. Latitude = 32° 17' 29.75" North Longitude = 100° 27' 4.96" W Project Start Date = December 2014 Project End Date = February 2015
Location of Storm Water Pollution Prevention Plan:	Site Trailer

For Small Construction Activities Authorized Under Part II.E.2. (Obtaining Authorization to Discharge) the following certification must be completed:

I _____ (Typed or Printed Name Person Completing This Certification) certify under penalty of law that I have read and understand the eligibility requirements for claiming an authorization under Part II.E.2. of TPDES General Permit TXR150000 and agree to comply with the terms of this permit. A storm water pollution prevention plan has been developed and will be implemented prior to construction, according to permit requirements. A copy of this signed notice is supplied to the operator of the MS4 if discharges enter an MS4. I am aware there are significant penalties for providing false information or for conducting unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

Signature and Title _____ Date _____

Date Notice Removed
MS4 operator notified per Part II.F.3.

Appendix C

Inspection and Maintenance Form

Attachment C – Construction SWPPP Inspection Checklist

Project Location: _____

Contractor: _____

Inspector/Title: _____

Date: _____

Is copy of SWPPP signed, and in a readily available location?

Has a significant change in operations, construction or maintenance occurred since last inspection?

Is inspection conducted within the last 14 days?

Instructions: This checklist may be used for verification of compliance.

(Check boxes coding: Y=Yes, N=No, P=Partial, A=Not Applicable).

Part 1: Verify what stage of construction project is in and record the dates when the activities started and were completed

	Comments	Start Date	Complete Date
a. Phase of Construction?	_____	_____	_____
b. Site Preparation?	_____	_____	_____
c. Trenching?	_____	_____	_____
d. Rough Grading Roads?	_____	_____	_____
e. Road Construction?	_____	_____	_____
f. Final Stabilization?	_____	_____	_____
g. BMPs placed in appropriate locations?	_____	_____	_____

Notes:

Part 2: Construction project site walk through; look for signs of sediment discharge locations, locations where BMPs need maintenance, locations where there are BMP failures, and locations where additional BMPs are needed.

MATERIAL STORAGE/WASTE MANAGEMENT AREAS

Y/N/P/NA Note

a. Are there signs of litter, construction debris, or construction materials beyond project site boundary?

☐

b. Are chemicals, oil, and fuel containers covered to prevent exposure to precipitation?

☐

c. Are waste containers free of leaks, corrosion, and signs of deterioration?

☐

d. Are waste containers emptied frequently (No overflowing trash)

☐

Part 3. Structural, Sediment and Erosion Controls

a.	Construction entrance structure in good condition?	<input type="checkbox"/>	<hr/>
b.	Are there signs of off-site tracking: sediments, mud, rutting?	<input type="checkbox"/>	<hr/>
c.	Are gravel/filter berms used in high traffic areas exhibiting visible signs of deterioration or sediment build up?	<input type="checkbox"/>	<hr/>
	Is silt fencing intact, no gaps and buried $\geq 6"$ underground and staking adequate?	<input type="checkbox"/>	<hr/>
e.	Are sediments visible at fence base (should be removed when 1/3 to 1/2 fence height)?	<input type="checkbox"/>	<hr/>
f.	Are outfall and storm drain inlet protection exhibiting accumulated sediments, or damage?	<input type="checkbox"/>	<hr/>
g.	Are designated preserved vegetative areas showing signs of encroachment/erosion?	<input type="checkbox"/>	<hr/>
h.	Are areas where soil roughening techniques are used exhibiting signs of wash-out?	<input type="checkbox"/>	<hr/>
i.	Are grass-lined channels established, free of litter and soil build-up, and channel cuts unobstructed?	<input type="checkbox"/>	<hr/>
j.	Are dust control measures in place and appear adequate?	<input type="checkbox"/>	<hr/>

Observations and areas requiring maintenance include:

Notes:

Part 4. Final Stabilization/Termination Checklista. Are all soil disturbing activities complete? ☐b. Are temporary erosion/sediment control measures removed/will be removed when appropriate? ☐c. Have all areas not covered by impervious materials achieved vegetative density of 70% or of original density? ☐d. Date of final/anticipated stabilization activities? ☐

Notes:

Part 5: Inspection Report Summary

Y/N/P/NA Information/Comments:

a. Any observations of sediment discharges, pollutants discharges, BMP repairs, BMP failure, or additional BMPs needed? ☐b. Are there any signs of hazardous materials exposed to storm water runoff? ☐– Have any spills in reportable quantities associated with construction activities occurred (Note circumstances surrounding release)? ☐• Was National Response Center notified? ☐• Was permitting authority notified in writing? ☐

- Was the BMP modified to include:

- Date of Release:

- Circumstances leading to release.*

- Steps taken to prevent reoccurrence*

- c. Are changes to the BMPs necessary following this inspection

- d. Have any notifications from regulatory agencies advising of changes needed for compliance, occurred?

- e. Is this the final inspection report?

Notes:

If construction ceases on the site for more than 14 days, the site must be stabilized until construction resumes.

Date Construction
Stopped

Date Construction
Resumed

Measure Taken to Stabilize Site

CHECK ONLY IF THIS IS TRUE

☐ Yes There were NO incidents of non-compliance noted during inspection. The facility is in compliance with the Construction SWPPP

Certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision under accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature

Printed Name

Date

Title

Appendix D

Recordkeeping

Appendix D – Recordkeeping

The following records must be maintained and attached to the BMP.

1. The dates when major grading activities occur.
2. The dates when construction activities temporarily or permanently cease.
3. The dates when the stabilization measures are initiated.

Appendix E

Contractor Certification

Appendix E - Contractor Certification

Copy/add additional pages as needed.

I certify under penalty of law that I understand the terms and conditions of the TPDES general permit that authorizes storm water discharges associated with industrial activity from the construction site identified as part of this certification.

Signature	For	Responsible For
<hr/> (Name) <hr/> (Position) <hr/> (Signature) Date: <hr/>	<hr/> (Company) <hr/> (Street / P.O. Box) <hr/> (City, State, Zip) Phone: <hr/>	<hr/> <hr/> <hr/> (Activity)
<hr/> (Name) <hr/> (Position) <hr/> (Signature) Date: <hr/>	<hr/> (Company) <hr/> (Street / P.O. Box) <hr/> (City, State, Zip) Phone: <hr/>	<hr/> <hr/> <hr/> (Activity)
<hr/> (Name) <hr/> (Position) <hr/> (Signature) Date: <hr/>	<hr/> (Company) <hr/> (Street / P.O. Box) <hr/> (City, State, Zip) Phone: <hr/>	<hr/> <hr/> <hr/> (Activity)

Appendix F

Training Documentation

Training Log

[illegible]

December 2014

Appendix G

Construction General Permit TXR150000

Texas Commission on Environmental Quality

P.O. Box 13087, Austin, Texas 78711-3087



GENERAL PERMIT TO DISCHARGE UNDER THE TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM

under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

This permit supersedes and replaces
TPDES General Permit No. TXR150000, issued March 5, 2008

Construction sites that discharge stormwater associated with construction activity
located in the state of Texas
may discharge to surface water in the state

only according to monitoring requirements and other conditions set forth in this general permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ or Commission), the laws of the State of Texas, and other orders of the Commission of the TCEQ. The issuance of this general permit does not grant to the permittee the right to use private or public property for conveyance of stormwater and certain non-stormwater discharges along the discharge route. This includes property belonging to but not limited to any individual, partnership, corporation or other entity. Neither does this general permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This general permit and the authorization contained herein shall expire at midnight, five years from the permit effective date.

EFFECTIVE DATE: March 5, 2013

ISSUED DATE: FEB 19 2013

A handwritten signature in black ink that reads "Bryan W. Shaw".

For the Commission

**TPDES GENERAL PERMIT NUMBER TXR150000 RELATING TO
STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION
ACTIVITIES**

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